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JPW/1626



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Salvatore AVOLIO et al.

Art Unit: 1626

Serial No.: 10/575,633

Examiner: Sun Jae Y. LOEWE

Filed: November 20, 2006

Case No.: ITT0061P USA

For: INDOLE AND AZAINDOLES AS  
ANTIVIRAL AGENTSCommissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**RESPONSE TO RESTRICTION REQUIREMENT**

Sir:

In response to the Office Action mailed December 14, 2007, which set a one-month period for response, please consider the following remarks.

Claims 1-10 and 13-19 are pending in this application.

In the December 14, 2007, Office Action, restriction of the pending claims under 35 U.S.C. §§121 and 372 into one of the following Groups was required:

Group I: claims 1-10, 13 and 14, drawn to products of formula I in which  $X^1=CR^a$ ,  $X^2=CR^1$ ,  $X^3=CR^2$ ,  $X^4=CR^b$ ,  $A^1=cyclohexyl$ , one of  $R^1$  or  $R^2$  is carboxy and  $Ar^1=Ar=phenyl$ , with the further election of a single compound required;

Group II: claims 1-10, 13 and 14, drawn to products of formula I in which  $X^1=CR^a$ ,  $X^2=CR^1$ ,  $X^3=CR^2$ ,  $X^4=CR^b$ ,  $A^1=cyclohexyl$ , one of  $R^1$  or  $R^2$  is carboxy and  $Ar^1$  or  $Ar$  is thiazolyl, with the further election of a single compound required;

Group III: claims 1-10, 13 and 14, drawn to products of formula I in which  $X^1=CR^a$ ,  $X^2=CR^1$ ,  $X^3=CR^2$ ,  $X^4=CR^b$ ,  $A^1=cyclohexyl$ , one of  $R^1$  or  $R^2$  is carboxy and  $Ar^1$  or  $Ar$  is pyridinyl, with the further election of a single compound required;

**EXPRESS MAIL CERTIFICATE**  
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 DATE 11/11/08

- Group IV: claims 1-10, 13 and 14, drawn to products of formula I in which  $X^1=CR^a$ ,  $X^2=CR^1$ ,  $X^3=CR^2$ ,  $X^4=CR^b$ ,  $A^1=cyclohexyl$ , one of  $R^1$  or  $R^2$  is carboxy and  $Ar^1$  or  $Ar$  is imidazolyl, with the further election of a single compound required and subject to further restriction;
- Group V: claims 1-10, 13 and 14, drawn to products of formula I not covered by Groups I-IV, with the further election of a single compound required and which may be subject to further restriction;
- Group VI: claims 15 and 19, drawn to methods of using products of Group I, with the further election of a single compound required;
- Group VII: claims 15 and 19, drawn to methods of using products of Group II, with the further election of a single compound required;
- Group VIII: claims 15 and 19, drawn to methods of using products of Group III, with the further election of a single compound required;
- Group IX: claims 15 and 19, drawn to methods of using products of Group IV, with the further election of a single compound required;
- Group X: claims 15 and 19, drawn to methods of using products of Group V, with the further election of a single compound required;
- Group XI: claims 16 and 17, drawn to methods of making products of Group I be reaction of compounds of Formulae IV and V, with the further election of a single compound of Formula I required;
- Group XII: claims 16 and 17, drawn to methods of making products of Group II be reaction of compounds of Formulae IV and V, with the further election of a single compound of Formula I required;
- Group XIII: claims 16 and 17, drawn to methods of making products of Group III be reaction of compounds of Formulae IV and V, with the further election of a single compound of Formula I required;
- Group XIV: claims 16 and 17, drawn to methods of making products of Group IV be reaction of compounds of Formulae IV and V, with the further election of a single compound of Formula I required;

- Group XV: claims 16 and 17, drawn to methods of making products of Group V be reaction of compounds of Formulae IV and V, with the further election of a single compound of Formula I required;
- Group XVI: claims 16 and 17, drawn to methods of making products of Group I be reaction of compound of Formula V, with the further election of a single compound of Formula I required;
- Group XVII: claims 16 and 17, drawn to methods of making products of Group II be reaction of compound of Formula V, with the further election of a single compound of Formula I required;
- Group XVIII: claims 16 and 17, drawn to methods of making products of Group III be reaction of compound of Formula V, with the further election of a single compound of Formula I required;
- Group XIX: claims 16 and 17, drawn to methods of making products of Group IV be reaction of compound of Formula V, with the further election of a single compound of Formula I required; and
- Group XX: claims 16 and 17, drawn to methods of making products of Group V be reaction of compound of Formula V, with the further election of a single compound of Formula I required.

The Office Action asserts that the subject matter of the claims of Groups I-XX does not relate to a single inventive concept. Specifically, the Office Action asserts that there are no same or corresponding special technical features, because the sole linking technical feature of the subject matter of Groups I-XX is the fused pyrrole, with all other features being variables, and that this feature is "taught in the prior art".

In response to the Restriction Requirement, Applicants elect Group I, claims 1-10, 13 and 14, drawn to products of formula I in which  $X^1=CR^a$ ,  $X^2=CR^1$ ,  $X^3=CR^2$ ,  $X^4=CR^b$ ,  $A^1=cyclohexyl$ , one of  $R^1$  or  $R^2$  is carboxy and  $Ar^1=Ar=phenyl$ , and specifically elect as the single compound the compound of Example 11 of the specification, 3-cyclohexyl-1-(3,5-dibromobenzyl)-2-phenyl-1*H*-indole-6-carboxylic acid.

The Office Action further requires an election of species with respect to the compounds encompassed by Formula I obtained by varying the substituents to the core structure. In order to fully respond to this requirement, Applicants make the following further elections from the Markush groups provided in independent claim 1:

Ar<sup>1</sup>: a moiety containing at least one aromatic ring and possessing 6 ring atoms;  
A<sup>1</sup>: C<sub>1-6</sub> alkyl, substituted by a non-aromatic alkyl ring of 6 ring atoms;  
X<sup>1</sup>: CR<sup>a</sup>, where R<sup>a</sup> is hydrogen;  
X<sup>2</sup>: CR<sup>1</sup>;  
X<sup>3</sup>: CR<sup>2</sup>;  
X<sup>b</sup>: CR<sup>b</sup>, where R<sup>b</sup> is hydrogen;  
R<sup>1</sup> and R<sup>2</sup>: one of R<sup>1</sup> and R<sup>2</sup> is carboxy and the other of R<sup>1</sup> and R<sup>2</sup> is hydrogen;  
Ar: a moiety containing at least one aromatic ring and possessing 6 ring atoms;  
n: 0; and  
p+q: 0.

These elections read on pending claims 1-10 and 13-19; and claim 1 is generic.

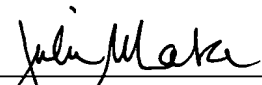
It is respectfully submitted that search and examination of the entire application could be made without serious burden. *See* MPEP §803, in which it is stated that "if the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions" (emphasis added). It is respectfully submitted that this policy should apply in the present application in order to avoid unnecessary delay and expense to Applicants and duplicative examination by the Patent Office.

Further, Applicants note that the December 14 Restriction Requirement indicates, on the Office Action Summary, that this is a final action. In light of the fact that no actions on the merits have been issued, Applicants respectfully request that the finality of this Action be withdrawn.

In view of these arguments, Applicants respectfully submit that this application is in condition for allowance. The Examiner is invited to contact the undersigned at the telephone number set forth below, should he believe that anything further is necessary to place this application in even better form for allowance.

Please charge Deposit Account No. 13-2755 for any fees due in connection with this Amendment. If any time extensions are needed for the timely filing of this Amendment, Applicants petition for such extensions and authorize the charging of Deposit Account No. 13-2755 for the necessary fees.

Respectfully submitted,

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